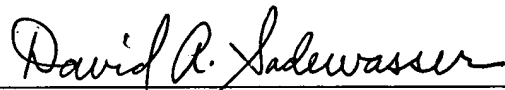


**Remarks/Arguments:**

The Notice to Comply With Requirement for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosure mailed March 12, 2004, has been complied with in the accompanying submission. Further, applicant respectfully submits both a marked up copy of original Figures 1 and 2, indicating in red ink the changes to the sequence listing identifiers and a clean copy of substitute Figures 1 and 2 under 37 CFR §1.85.

The Examiner is invited to contact Applicants' undersigned representative at (215) 665-2033 if there are any questions regarding Applicants' claimed invention.

Respectfully submitted,



David A. Sadewasser, Registration No. 55,587  
Agent for Applicants

Dated: May 10, 2004

Cozen O'Connor, P.C.  
1900 Market Street  
Philadelphia, PA 19102

The Commissioner for Patents is hereby  
authorized to charge payment to Deposit  
Account No. 50-1275 of any fees associated  
with this communication.

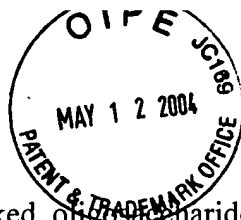


Figure 1. N-linked oligosaccharides for glycosylation

Peptide sequence (SEQ ID NO:5):

MPFVNKQFNY KDPVNGVDIA YIKIPNAGQM QPVKAFKIHN KIWVIPERDT FTNP EEGDLN  
 PPPEAKQVPV SYDSTYLST DNEKDNLYKG VTKLFERIYS TDLGRMLLTS IVRGIPFWGG  
 STIDTELKVI DTNCINVIQP DGSYRSEELN LVIIGPSADI IQFECKSFGH EVLNLTRNGY  
 GSTQYIRFSP DFTFGFEESL EVDTNPLLGA GKFDTPAVT LAHELHAGH RLYGIAINPN  
 RVFKVNTNAY YEMSGLEVSF EELRTFGGHD AKFIDSLQEN EFRLYYYNKF KDIASLTNKA  
 KSIVGTTASL QYMKNVFKEK YLLSEDTSKG FSVDKLFKFDK LYKMLTEIYT EDNFVKFFKV  
 LNRKTYLNFD KAVFKINIVP KVNYYTIYDGF NLRNTNLAAN FNGQNTTEINN MNFTKLKNFT  
 GLFEFYKLLC VRGIITSKTK SLDKGYNKAL NDLCIKVNNW DLFFSPSEDN FTNDLNKGEE  
 ITSDTNIEAA EENISLDLIQ QYYLTFNFDN EPENISINENL SSDIIGQLEL MPNIERFPNG  
 KKYELDKYTM FHYLRAQEFH HGKSRIALTN SVNEALLNPS RVTFFSSDY VKKVNKATEA  
 AMFLGWVEQL VYDFTDETSE VSTTDKIADI TIIIPYIGPA LNIGNMLYKD DFVGALIFSG  
 AVILLEFIPE IAIPVLGTFA LVSYIANVKL TVQTIDNALS KRNEKWDEVY KYIVTNWLAK  
 VNTQIDLRK KMKEALENQA EATKAIINYQ YNQYTEEEKN NINFNIDDL SKLNESINKA  
 MININKFLNQ CSVSYLMNSM IPYGVKRLD FDASLKDALL KYIYDNRGTL IGQVDRKDK  
 VNNTLSTDIP FQLSKYVDNQ RLLSTFTEYI KNIINTSILN LRYESNHLID LSRYSKINI  
 GSKVNFDPID KNQIQLFNLE SSKIEVILKN AIVYNSMYEN FSTSFWRIP KYFNSISLNN  
 EYTIINCMEN NSGWKVS LNY GEIITWLQDT QEIKQRVVFK YSQMINISDY INRWIFVTIT  
 NNRLNNSKIY INGRIDQKP ISNLGNIHAS NNIMFKLDGC RDTHRYIWIY YFNLFDKELN  
 EKEIKDLYDN QSNIGILKDF WGDYLYQYDKP YYMLNLYDPN KYVDVNNVGI RGYMYLKGPR  
 GSVMTTNIYL NSSLYRGTKF IIKKYASGNK DNIVRNNDRV YINVVVKNE YRLATNASQA  
 GVEKILSALE IPDVGNLSQV VVMKSKNDQG ITNKCKMNLQ DNNGNDIGFI GFHQFNNAK  
 LVASNWNRY IERSSRTLGC SWEFIPVDDG WGERPL

Peptides containing the motif 'N-X-S/T/C (X not P)'(underlined):

position	Peptide	SEQ ID NO:
167-177	SFGHEVL <u>NL</u> TR	6
382-393	V <u>NY</u> TIYDGFNLR	7
394-415	NTNLAANFNGQNTTEINN <u>MN</u> FTK	8
418-427	<u>NFT</u> GLFEFYK	9
457-477	VNNWDLFFSPSED <u>NFT</u> NDLN K	10
478-536	GEEITSDTNIEAAEEN <u>IS</u> LD LIQQYYLTFNFDNE <u>PEN</u> IS	11
773-779	LNESINK	12
787-806	FLNQCSVSYLMNSMIPYGVK	13
841-855	V <u>NN</u> TLSTDIPFQLSK	14
872-882	NI <u>INT</u> SILNLR	15
930-948	NAIVYNSMYEN <u>F</u> STSFWR	16
952-975	YFNSISLNNEYTIINCMEN <u>N</u> SGWK	17
1001-1013	YSQMIN <u>IS</u> DYINR	18
1024-1028	L <u>NN</u> SK	19
1086-1098	DLYDNQSNISGILK	20
1141-1156	GSVMTTNIYLN <u>SS</u> LYR	21
1193-1204	LATNASQAGVEK	22
1205-1224	ILSALEIPDVGN <u>LS</u> QVVVMK	23

Figure 1 Continue.

Peptide sequence (~~SEQ ID NO: 24~~): (SEQ ID NO: 39)

KTKSLDKGYN KALNDLCIKV NNWDLFFSPS EDNFTNDLNK GEEITSDTNI EAAEENISLD  
 LIQQYYLTFN FDNEPENISI ENLSSDIIGQ LELMPNIERF PNGKKYELDK YTMFHYLRAQ  
 EFEHGKSRIA LTNSVNEALL NPSRVYTFFS SDYVKKVNKA TEAAMFLGWV EQLVYDFTDE  
 TSEVSTTDKI ADITIIIPYI GPALNIGNML YKDDFVGALI FSGAVILLEF IPEIAIPVLG  
 TFALVSYIAN KVLTVQTIDN ALSKRNEKWD EVYKYIVTNW LAKVNTQIDL IRKKMKEALE  
 NQAEATKAI NYQYNQYTEE EKNNINFNID DLSSKLNESI NKAMININKF LNQC SVSYLM  
 NSMIPYGVR LEDFDASLKD ALLKYIYDNR GTLIGQVDRL KDKVNNTLST DIPFQLSKYV  
 DNQRLLSTFT EYIKNIINTS ILNLRYESNH LIDLSRYASK INIGSKVNFD PIDKNQIQLF  
 NLESSKIEVI LKNAIVYNSM YENFSTSFWI RIPKYFNSIS LNNEYTIINC MENNSGWKVS  
 LNYGEIIWTL QDTQEIKQRV VFYKYSQMINI SDYINRWIFV TITNNRLNNS KIYINGRLID  
 QKPISNLGNI HASNNIMFKL DGCRDTHRYI WIKYFNLFDK ELNEKEIKDL YDNQSN SGIL  
 KDFWGDYLQY DKPYMYMLNLY DPNKYVDVNN VGIRGYMYLK GPRGSVMTN IYLNSSLYRG  
 TKFIIKKYAS GNKDNIVRNN DRVYINVVVK NKEYRLATNA SQAGVEKILS ALEIPDVGNL  
 SQVVVMKSKN DQGITNKCKM NLQDNNGNDI GFIGFHQFNN IAKLVASNWY NRQIERSSRT  
 LGCSWEFIPV DDGWERPL

**Peptides containing the motif 'N-X-S/T/C (X not P)':**

position	peptide	SEQ ID NO:
20-40	VNNWDLFFSPSEDNFTNDLN K	25
41-99	GEEITSDTNIEAAEENISLD LIQQYYLTFNFDNEPENISI	26
	ENLSSDIIGQLELMPNIER	27
336-342	LNESINK	28
350-369	FLNQC SVSYLMNSMIPYGVK	29
404-418	VNNTLSTDIPFQLSK	30
435-445	NIINTSILNLR	31
493-511	NAIVYNSMYENFSTSFWIR	32
515-538	YFNSISLNNEYTIINCMENN SGWK	33
564-576	YSQMINISDYINR	34
587-591	LNN SK	35
649-661	DLYDNQSN SGILK	36
704-719	GSVMTTNIYLNSSLYR	37
756-767	LATNASQAGVEK	38
768-787	ILSALEIPDVGNLSQVVVMK	

Figure 2.

Peptide sequence (SEQ ID NO: 39):

MPFVNKQFNY KDPVNGVDIA YIKIPNAGQM QPVKAFKIHN KIWVIPERDT FTNP EEGDLN  
 PPPEAKQVPV SYDSTYLST DNEKDNYLKG VTKL FERIYS TDLGRMLLTS IVRGIPFWGG  
 STIDTELKVI DTNCINVIQP DGSYRSEELN LVIIGPSADI IQFECKSFGH EVLNLTRNGY  
 GSTQYIREFSP DFTFGFEESL EVDTNPLLGA GK FATDPAVT LAHEL IHAGH RLYGIAINPN  
 RVFKVNTNAY YEMSGLEV SF EELRTFGGHD AKFIDSLQEN EFRLYYYNKF KDIAS TLNKA  
 KSIVGTTASL QYMKNVFKEK YLLSED TSGK FSVDKLKFDK LYKMLTEIYT EDNFVKFFKV  
 LNRKTYLNFD KAVFKINIVP KVN YTIYDGF NLRNTNLAAN FNGQNT EINN MNFTKLKNFT  
 GLFEFYKLLC VRGIITSKTK SLDKGYNKAL NDLCIKVNNW DLFFSP SEDN FTNDLNKGEE  
 ITS DTNIEAA EENISLDLIQ QYYLT FNFDN EPENISIENL SSDIIGQLEL MPNIERFPNG  
 KKYELDKYTM FH YLRAQE FE HGKSRIALTN SVNEALLNPS RVY TFFSSDY VKKV NKATEA  
 AMFLGWVEQL VYDFTDETSE VSTTDKIADI TIIIPYIGPA LNIGNM LYKD DFGALIFSG  
 AVILLEFIPE IAIPVLGTFA LVS YIANKVL TVQTIDNALS KRNEKWDEVY KYIVTNWLAK  
 VNTQIDLIRK KMKEALENQA EATKAIINYQ YNQYTEEEKN NINFNIDDL SSKL NESINKA  
 MININKFLNQ CSVSYLMNSM IPYGVKRLED FDASLKDALL KYIYDNRGTL IGQVDR LKDK  
 VNNTLSTDIP FQLSKYVDNQ RLLSTFTEYI KNIINTSILN LRYESNHLID LSRYASKINI  
 GSKVNFDPID KNQIQLFNLE SSKIEVILKN AIVYNSMYEN FSTSFWRIP KYFNSISLNN  
 EYTIINC MEN NSGWKVS LNY GEI IWT LQDT QEIKQRV VFK YSQMINISDY INRWIFVTIT  
 NNRLNNSKIY INGR LIDQKP ISNLGNIHAS NNIMFKLDGC RDTHRYIWIK YFNLF DKELN  
 EKEKDLYDN QNSNGILKDF WGDY LQYDKP YYMLNLYDPN KYVDVNNVGI RGYMYLKGPR  
 GSVMTTNIYL NSSLYRGTKF I IKKYASGNK DNIVRNNDRV YINVVVKNKE YRLATNASQA  
 GVEKILSALE IPDVG NLSQV VVMKSKNDQG ITNKCKMNLQ DNNGNDIGFI GFHQFN NIAK  
 LVASNWYNRQ IERSSRTLGC SWEFIPVDDG WGERPL

Peptides containing S or T (underlined):

position	peptide	SEQ ID NO:
49-66	D <u>T</u> FTNP EEGDLNPPPEAK	40
67-84	QVPV <u>S</u> YYD <u>S</u> TYL <u>S</u> TDNEK	41
90-93	G <u>V</u> TK	42
98-105	IY <u>S</u> TDLGR	43
106-113	MLLT <u>S</u> IVR	44
114-128	GIPFWGG <u>S</u> TIDTELK	45
129-145	VIDTNCINVIQPDG <u>S</u> YR	46
146-166	<u>S</u> EELNLVIIGP <u>S</u> ADIIQFEC K	47
167-177	<u>S</u> FGHEVLNL <u>T</u> R	48
178-187	NGY <u>G</u> <u>S</u> TQYIR	49
188-212	FSPDFTFGFEESLEVD <u>T</u> NPL LGAGK	50
213-231	FATDPAVT <u>L</u> AHEL IHAGHR	51
245-264	VNTNAYYEMSGLEV <u>S</u> FEELR	52
265-272	<u>T</u> FGGHDAK	53
273-283	FID <u>S</u> LQENEFR	54
292-299	DIA <u>S</u> TLNK	55
302-314	SIVGTTASLQYMK	56
321-330	YLL <u>S</u> EDT <u>S</u> GK	57
331-335	F <u>S</u> VDK	58
344-356	MLTEIY <u>T</u> EDNFVK	59
365-371	<u>T</u> YLNFDK	<del>70</del> 60
382-393	VNYT <u>I</u> YDGFNL R	<del>71</del> 61
394-415	N <u>T</u> NLAANFNGQNT <u>E</u> INNMNF <u>T</u> K	<del>72</del> 62
418-427	NFTGLFEFYK	<del>73</del> 63
433-438	GI <u>T</u> SK	<del>74</del> 64
439-440	<u>T</u> K	<del>75</del>
441-444	<u>S</u> LDK	76 66

Figure 2  
Continue

457-477	VNNWDLFFSPSEDNFTNDLN K	<del>77</del>	67
478-536	GEEITSDTNEAAEENISLD LIQQYYLT FNFDNEPENISI	<del>78</del>	68
548-555	ENLSSDIIGQLELMPNIER	<del>79</del>	69
564-565	YTMFHLYR	<del>80</del>	
566-581	SR	<del>81</del>	71
582-592	IALTNSVNEALLNPSR	<del>82</del>	72
597-626	VYTFSSDYVK	<del>83</del>	73
627-649	ATEAAMFLGWVEQLVYDFTD ETSEVSTTDK	<del>84</del>	74
650-688	IADITIIPYIGPALNIGNM LYK	<del>85</del>	75
689-701	DDFVGALIFSGAVILLEFIP EIAIPVLGTFALVS <sup>Y</sup> IANK	<del>86</del>	76
712-720	VLTVQTIDNALSK	<del>87</del>	77
721-729	YIVTNWLAK	<del>88</del>	78
734-744	VNTQIDLR	<del>89</del>	79
745-759	EALNQAEATK	<del>90</del>	80
760-772	AIINYQYNQYTEEEK	<del>91</del>	81
773-779	NNINFNIDDLSSK	<del>92</del>	82
787-806	LNESINK	<del>93</del>	83
808-816	FLNQCSVSYLMNSMIPYGVK	<del>94</del>	84
828-836	LEDFDA <sup>S</sup> LK	<del>95</del>	85
841-855	GTLIGQVDR	<del>96</del>	86
862-871	VNNTLSTDIPFQLSK	<del>97</del>	87
872-882	LLSTFTEYIK	<del>98</del>	88
883-893	NIINTSILNLR	<del>99</del>	89
894-897	YESNHLIDL <sup>S</sup> R	<del>100</del>	90
898-903	YASK	<del>101</del>	91
912-923	INIGSK	<del>102</del>	92
930-948	NQIQLFNLESSK	<del>103</del>	93
952-975	NAIVYNSMYENFSTSF <sup>W</sup> IR	<del>104</del>	94
976-994	YFN <sup>S</sup> ISLNNEYTIINCMENN SGWK	<del>105</del>	95
1001-1013	VSLNYGEIHWTLQDTQEIK	<del>106</del>	96
1014-1023	YSQMINISDYINR	<del>107</del>	97
1024-1028	WIFVTITNNR	<del>108</del>	98
1035-1056	LNNSK	<del>109</del>	99
1062-1065	LIDQKPI <sup>S</sup> NLGNIHASNNIM FK	<del>110</del>	100
1086-1098	DTHR	<del>111</del>	101
1141-1156	DLYDNQSN <sup>S</sup> GILK	<del>112</del>	102
1157-1159	GSVMTTNIYLN <sup>S</sup> SLYR	<del>113</del>	
1165-1170	GTK	<del>114</del>	104
1193-1204	YASGNK	<del>115</del>	103
1205-1224	LATNASQAGVEK	<del>116</del>	70
1225-1226	ILSALEIPDVG <sup>N</sup> LSQVVVMK	<del>117</del>	
1227-1234	SK	<del>118</del>	65
1261-1269	NDQGITNK	<del>119</del>	24
1274-1276	LVA <sup>S</sup> NWYNR	<del>120</del>	
1277-1296	SSR	<del>121</del>	105
	TLGCSWEFIPVDDGWGERPL		